Three new species of the genus *Pegomya* from Yunnan Province，China

（Diptera：Anthomyiidae）

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Abstract：This paper describes three new species of the genus *Pegomya* from Yunnan province，China：*P. acisophalla* sp. nov.，*P. cricophalla* sp. nov. and *P. lageniforceps* sp. nov. All type specimens are deposited in the Institute of Entomology，Shenyang Normal University，Shenyang.

Key words：Diptera；Anthomyiidae；*Pegomya*；new species；China

By now，96 species of *Pegomya* have been recorded in China（Ackland，1967；Hennig，1966－1976；Suwa，1974；Fan *et al.*，1988）. Re-examination of specimens collected in Yunnan province by the Yunnan Health and Anti-epidemic Station in recent years revealed that three species were new to science. These are described as follows.

1. *Pegomya acisophalla* sp. nov.（Figs. 1－3）

♂ Length of body 6.5 mm. Eyes sparsely covered with microscopic hairs；frons wider than anterior ocellus；interfrontalia dark brown，without *if* and *ors*，and narrower than parafrontalia；parafrontalia with 6－7 pairs of inclinated *ori*，parafrontaliae，parafacialiae and genae dark brown in ground color and with silvery gray pollinose；parafacialia equal to the width of antenna；antennae dark brown，A_3 about 2.5 times as long as wide；arista pubescent，the longest hair shorter than the diameter of basal part of arista，thickened in basal 1/4；epistoma behind frons at lunule；genal height equal to 0.2 times of eye height；hairs of metacephalon and palpi gold；haustellum with prementum blackish and without pollinose.

Thorax. Ground color black and with blue-gray pollinosity；mesonotum with 4 rather distinct vittae when viewed from behind，*pre acr* 2－3；*ph* 1＋1；*dc* 2＋3；*ia* 0＋2；*pra* equal to 2 times length of posterior *ntpl*；mesopleura with small anterior *mpl*；notopleura without accessory setulae；prostigma yellowish，lower margin of poststigma with downward setulae；*stpl* 0＋2.

Wings light fuscous hyaline，veins brownish to brown，basicosta plain brown，costal spine absent，costa with spinular setae on ventral surface. Calypters yellow，lower one indistinctly protruding beyond the upper. Halteres yellow.

Legs yellow except tarsi and knee dark brown；fore tibia with 1 submedial *ad* and 2 *p*；mid femur with a complete row of *pv* and 2－3 *av* in basal part，mid tibia with 1 *ad*，1 *pd* and 2 *p*；hind femur with a complete row of *av* and 3－4 long setae in the medial part；hind tibia with 2 *av*，3 *ad* and 2 *pd*，without apical *pv*；tarsi normal.

Abdomen ellipsoid in dorsal view，with a median dark black vitta，basal part dark black，4th and 5th tergites dark brown in ground color，3rd to 5th tergites each with a complete row of marginal bristles，the longest bristle about 1.2 times tergite length respectively，6th tergite and 1st sternite setulose，5th sternite projecting；terminalia orange.

♀ Unknown.

Holotype ♂，Pianma，Lushui，Yunnan Province，3 020 m，26. Ⅴ. 1 992，paratype 1 ♂，same as holo-

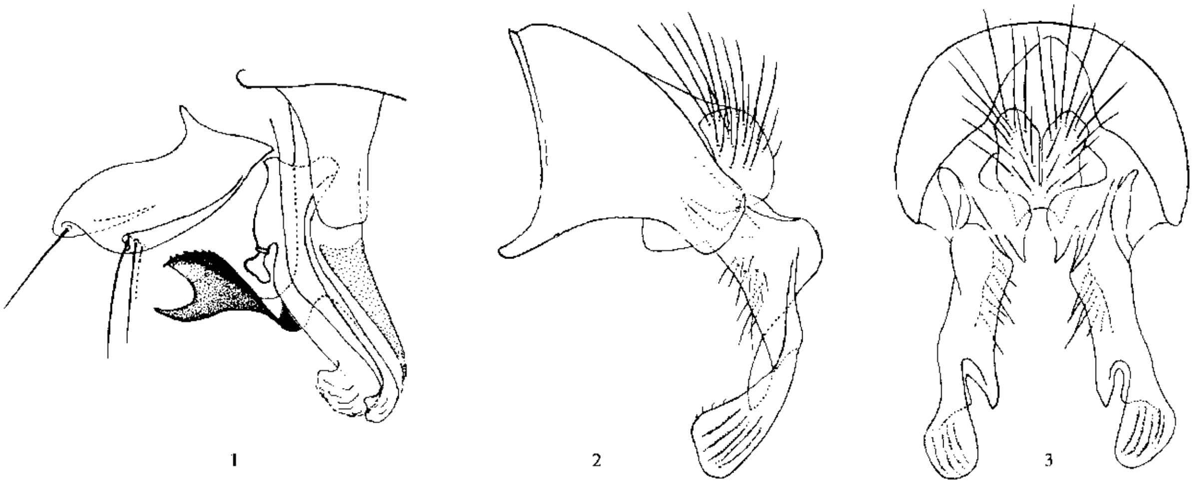
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type, by LI Fu-Hua.

This new species is close to *Pegomya flaviprecoxa* Li *et* Deng, 1983 (Fan *et al.*, 1988), but differs from the latter in the follows: frons about wider than anterior ocellus; parafacialia equal to the width of antenna; arista pubescent, the longest hair shorter than the diameter of basal part of arista; mid and hind coxae yellow; hind tibia with 3 *ad*; 5th sternite projecting; acrophallus equal to length of paraphallis in profile, distal part of surstylis broad and with wrinkles.



Figs.1－3　*Pegomya acisophalla* sp. nov. ♂

1. genitalia in profile; 2. terminalia in profile; 3. terminalia in posterior view

2. *Pegomya cricophalla* sp. nov. (Figs. 4－8)

♂Length of body 5.2 mm. Eyes bare; frons equal to the width of anterior ocellus; interfrontalia dark brown and equal to width of parafrontalia, without *if* and *ors*, *ori* 6－7; parafacialiae orange in ground color, and covered with silvery gray pollen, parafacialia equal to width of antenna; antennae black, A_3 about 2.5 times as long as wide; arista short pubescent, the longest hair shorter than diameter of aristal base; epistoma behind frons at lunule; genal height equal to 0.25 time of eye height; occiput with no setulae on upper part; prementum covered with gray pollen, palpi orange except apical part black.

Thorax. Pleural region dark brown in ground color; mesonotum black with 5 indistinct vittae, width of medial vitta equal to distance between the two *ac* rows, and stretches to scutellar suture; 3 pairs of *pre acr*; *dc* 2＋3; *ph* 1＋1; *pra* longer than posterior *ntpl*; notopleura without accessory setulae; mesopleura without distinct anterior *mpl*; *stpl* 1＋3.

Wings hyaline; basicosta yellow, costal spines small, costa with setae on ventral surface, about longer than r-m cross vein. Calypters light yellowish, lower calypter not protruding beyond the upper one. Halteres yellowish.

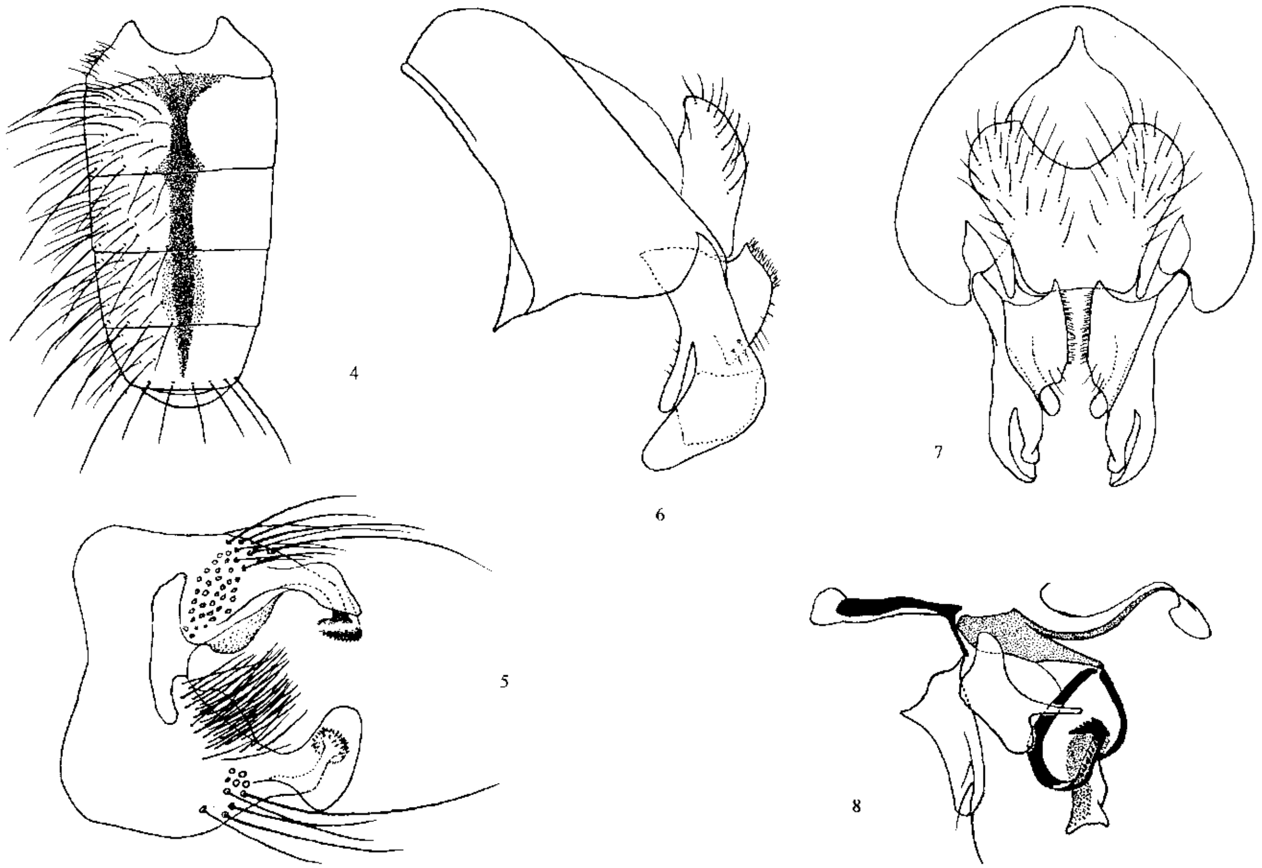
Legs. Wholly orange except coxa, trochanter and tarsus brown; fore tibia with 1 medial *ad*; mid femur with 5 *pv* on basal half, *mid* tibia with 1 submedial short *ad* and 2 *p*; hind femur with a row of *av*, *pv* setula-like, only 1－2 long; hind tibia with 1－2 *av*, 2 *ad* and 2 *pd*, without apical *pv*; claws longer than pulvilli.

Abdomen. Ground color black, longish ellipsoid in dorsal view, with gray pollen, 2nd to 5th tergites each with a median dark black vitta, along which with orange pollen; 6th tergite bare; 1st sternite with hairs.

♀ Unknown.

Holotype ♂, Pianma, Lushui, Yunnan Province, 3 020 m, 26. Ⅴ. 1992; paratype 1 ♂, same as holotype, by LI Fu-Hua.

This new species resembles *Pegomya phyllostachys* Fan, 1964 (Fan *et al.*, 1988; Fan *et al.*, 1992,), but differs from the latter in having male terminalia special; paraphallus annulated, anterior gonapophyses simple, posterior gonapophyses with a small branch; distal part of lateral lobe of 5th sternite with sclerotic redundant lobe.



Figs. 4－8 *Pegomya cricophalla* sp. nov. ♂

4. abdomen in dorsal view; 5. 5th sternite in ventral view; 6. terminalia in profile; 7. terminalia in posterior view; 8. genitalia in profile

3. *Pegomya lageniforceps* sp. nov. (Figs. 9－11)

♂ Length of body 7.2 mm. Eyes bare; frons wider than anterior ocellus; interfrontalia brownish, parafrontaliae approximated, with 6－7 pairs of inclinate ori, without *ors* and *if*; parafrontalia, parafacialia and gena gray pollinose; parafacialia about equal to the width of A_3; antennae orange, A_3 about 2.5 times as long as wide; arista pubescent, the longest hair about equal to the diameter of basal part of arista; genal height about 1/5 of eye height, 1 row of genal setae; occiput with setulae on upper part, hairs of metacephalon yellowish; prementum black and bright; palpi yellow.

Thorax. Ground color blackish and with dense blue-gray pollinosity; mesonotum when viewed from behind with three dark black vittae, *pre acr* 3－4, *post acr* 2－3, *dc* 2+3, *ia* 0+2, *ph* 1+1; *pra* longer than anterior *npl*, notopleura with no accessory setulae; mesopleura with 1 distinct anterior *mpl*, apical part of scutellum brown; prostigma yellow, poststigma orange, lower margin of poststigma with a row of downward setulae; *stpl* 1+2.

Wings about hyaline, veins orange, basicosta yellow; costal spine indistinct. Calypters yellowish, lower one not protruding beyond the upper. Halteres yellow.

Legs. Wholly yellow except tarsi and knees brownish; fore tibia with 1 preapical *ad* and 2－3 *pv*; basal 1/4 of mid femur with a row of setula formed *av*, a complete row of *pv* being long, 1 preapical ad and 3 *pd*, mid tibia with 1 *ad*, 1 *pd* and 3 *p*, mid metatarsus normal; hind femur with a row of *av*, 2－3 *pv* on the medial part; hind tibia with 2 *av*, 3 *ad* and 2 *pd*, without apical *pv*; claws and pulvilli small.

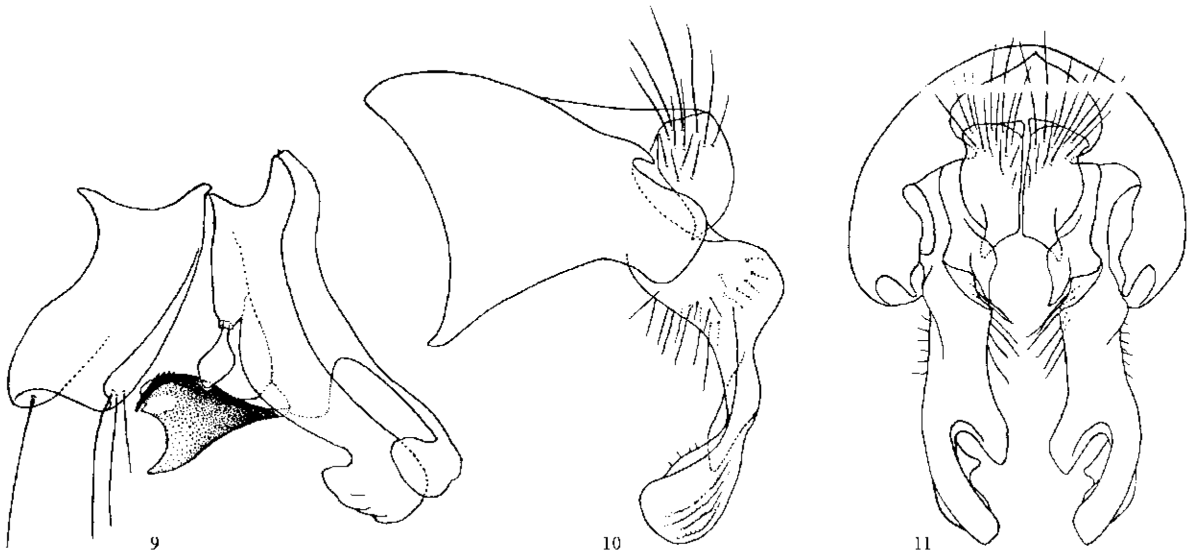
Abdomen ovate in dorsal view, blackish in ground color, with gray-white pollen; every tergite with a median black narrow vitta; the 3rd to 5th tergites with a complete row of long bristles on posterior margin, 6th tergite with setae, 1st sternite haired, 5th sternite dark black and not projecting, terminalia orange.

♀ Unknown.

Holotype ♂, Pianma, Lushui, Yunnan Province,

3 020 m, 26. Ⅴ. 1992, by LI Fu-Hua.

This new species is similar to *Pegomya flaviprecoxa* Li *et* Deng, 1983 (Fan *et al*., 1992), but differs from the latter in male antennae orange; parafacialia about equal to the width of A_3; genal height 2 times width of parafacialia; veins orange; apical part of scutellum brown; coxae of mid and hind yellow, mid tibia with 3 *p*, hind femur with 2 – 3 *pv* on the medial part, hind tibia with 3 *ad*. Terminalia different, apical part of fore branch of posterior gonapophyses rhomb; distal part of surstylis broad in posterior view; cerci calabash-like in posterior view; acrophallus short and slender.



Figs. 9 – 11　*Pegomya lageniforceps* sp. nov. ♂

9. genitalia in profile; 10. terminalia in profile; 11. terminalia in postrior view

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云南泉蝇属三新种

（双翅目：花蝇科）

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摘要： 本文记述采自云南省泉蝇属 3 新种。1. 分布于云南省泸水片马的尖阳泉种蝇 *Pegomya acisophalla* sp. nov.，该种近似于四川产的黄前基泉蝇 *Pegomya flaviprecoxa* Li *et* Deng，1983，但新种雄额宽于前单眼，侧颜等于触角宽，最长芒毛短于芒基粗；中足和后足基节黄色，后胫前背鬃 3；第五腹板突立；阳茎端阳体和侧阳体等长，侧尾叶端部较宽大，表面有皱纹。2. 分布于云南泸水片马的环阳泉蝇 *Pegomya cricophalla* sp. nov.，该种近似毛笋泉蝇 *Pegomya phyllostachys* Fan，1964，但新种雄尾器特殊，侧阳体呈环状，前阳基侧突单纯，后阳基侧突具小分支，第五腹板侧叶除基部具赘叶外，在端部具骨化的赘叶，其边缘具小齿。3. 分布于云南泸水片马的葫叶泉蝇 *Pegomy lageniforceps* sp. nov.，该种近似黄前基泉蝇 *Pegomya flaviprecoxa* Li *et* Deng，1983，但新种雄性触角淡棕色，侧颜约等于触角宽，颊高为侧颜宽的 2 倍；小盾端部带褐色；翅脉淡棕色；中足后足基节黄色，中胫后鬃 3，后股中部具 2～3 根后腹鬃，后胫前背鬃 3；雄性尾器不同，后阳基侧突前枝的端部为菱形，侧尾叶端部后面观略宽大，肛尾叶近葫形，阳体的端阳体较短而细。模式标本保存于沈阳师范大学昆虫研究所。

关键词： 双翅目；花蝇科；泉蝇属；新种；中国
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